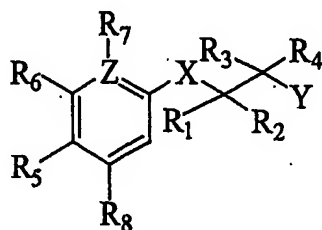


## CLAIMS

1. Use of a compound according to Formula I in the manufacture of a medicament for the treatment of a disease caused by a disturbance in the activity of the androgen receptor, wherein Formula I is defined as:



Formula I

in which;

R<sub>1</sub> and R<sub>2</sub> are the same or different and independently selected from the group consisting of; hydrogen, halogen, C<sub>1</sub>-C<sub>10</sub> alkyl, C<sub>1</sub>-C<sub>10</sub> substituted alkyl, C<sub>2</sub>-C<sub>10</sub> alkenyl, C<sub>2</sub>-C<sub>10</sub> alkynyl, C<sub>1</sub>-C<sub>10</sub> alkoxy, C<sub>1</sub>-C<sub>10</sub> alkenoxy, C<sub>1</sub>-C<sub>10</sub> alkynoxy, C<sub>1</sub>-C<sub>10</sub> alkylthio, C<sub>1</sub>-C<sub>10</sub> alkenylthio, C<sub>1</sub>-C<sub>10</sub> alkynylthio, C<sub>6</sub>-C<sub>10</sub> arylthio, C<sub>1</sub>-C<sub>10</sub> alkylsulphone, C<sub>1</sub>-C<sub>10</sub> alkenylsulphone, C<sub>1</sub>-C<sub>10</sub> alkynylsulphone, C<sub>6</sub>-C<sub>10</sub> arylsulphone, C<sub>1</sub>-C<sub>10</sub> alkylsulphoxide, C<sub>1</sub>-C<sub>10</sub> alkenylsulphoxide, C<sub>1</sub>-C<sub>10</sub> alkynylsulphoxide, C<sub>6</sub>-C<sub>10</sub> arylsulphoxide, C<sub>1</sub>-C<sub>10</sub> alkylarylthio, C<sub>1</sub>-C<sub>10</sub> alkylarylulphone, C<sub>1</sub>-C<sub>10</sub> alkylarylulphoxide, C<sub>6</sub>-C<sub>10</sub> aryl, or C<sub>5</sub>-C<sub>20</sub> heteroaryl, optionally substituted with 0, 1, 2 or 3 groups of R<sup>a</sup> which groups may be the same or different; or R<sub>1</sub> and R<sub>2</sub> may together form a C<sub>3</sub>-C<sub>10</sub> cycloalkyl group;

R<sub>3</sub> and R<sub>4</sub> are the same or different and independently selected from hydrogen, halogen, C<sub>1</sub>-C<sub>20</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>2</sub>-C<sub>4</sub> alkenyl, C<sub>2</sub>-C<sub>4</sub> alkynyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkenoxy, C<sub>1</sub>-C<sub>4</sub> alkynoxy, C<sub>1</sub>-C<sub>4</sub> alkylthio, C<sub>1</sub>-C<sub>4</sub> alkenylthio, C<sub>1</sub>-C<sub>4</sub> alkynylthio, C<sub>1</sub>-C<sub>10</sub> alkylsulphone, C<sub>1</sub>-C<sub>10</sub> alkenylsulphone, C<sub>1</sub>-C<sub>10</sub> alkynylsulphone, C<sub>6</sub>-C<sub>10</sub> arylsulphone, C<sub>1</sub>-C<sub>10</sub> alkylsulphoxide, C<sub>1</sub>-C<sub>10</sub> alkenylsulphoxide, C<sub>1</sub>-C<sub>10</sub> alkynylsulphoxide, C<sub>6</sub>-C<sub>10</sub> arylsulphoxide, C<sub>1</sub>-C<sub>10</sub> alkylarylthio, C<sub>1</sub>-C<sub>10</sub> alkylarylulphone, C<sub>1</sub>-C<sub>10</sub> alkylarylulphoxide, C<sub>6</sub>-C<sub>15</sub> aryl, C<sub>5</sub>-C<sub>20</sub> heteroaryl optionally substituted with 0, 1, 2 or 3 groups of R<sup>a</sup> which groups may be the same or different; or can together form a keto group;

R<sub>5</sub> is chosen from the group consisting of; nitro, cyano, -CH<sub>2</sub>CN, -COMe, acetic acid, halogen, sulphonic acid, -SO<sub>2</sub>CH<sub>3</sub>, aldehyde, carboxylic acid or ester, phosphonic acid or ester;

R<sub>6</sub> is chosen from the group consisting of; hydrogen, C<sub>1</sub>-C<sub>3</sub> alkyl, halogen, CN, CO<sub>2</sub>H, CHF<sub>2</sub>, CH<sub>2</sub>F or CF<sub>3</sub>;

R<sub>7</sub> is chosen from the group consisting of; H, halogen or C<sub>1</sub>-C<sub>3</sub> alkyl;

R<sub>8</sub> is chosen from the group consisting of; hydrogen, C<sub>1</sub>-C<sub>3</sub> alkyl, halogen, CHF<sub>2</sub>, CH<sub>2</sub>F or CF<sub>3</sub>;

X is chosen from the group consisting of; -NH-, -O-, -S-, -SO-, -SO<sub>2</sub>-, -Se-, -Te- or -S-S-

Y is chosen from the group consisting of; hydrogen, hydroxy, -CH<sub>2</sub>OH, methoxy, NH<sub>2</sub>, unbranched, branched or cyclic C<sub>1</sub>-C<sub>5</sub> alkyl, unbranched, branched or cyclic -NH(C<sub>1</sub>-C<sub>3</sub>)<sub>2</sub>; unbranched, branched or cyclic N(C<sub>1</sub>-C<sub>3</sub>)<sub>2</sub>, -NH(C<sub>6</sub>aryl), -N(C<sub>6</sub>aryl)<sub>2</sub>, -NH(C<sub>1</sub>-C<sub>10</sub> heteroaryl), and -N(C<sub>5</sub>-C<sub>10</sub> heteroaryl)<sub>2</sub>, C<sub>5</sub>-C<sub>10</sub> heteroaryl wherein any of said aryl or heteroaryl groups are optionally substituted with up to 3 groups of R<sup>a</sup> which groups may be the same or different;

Z is chosen from the group consisting of; C, N, or O;

R<sup>a</sup> represents a member selected from: hydrogen, halogen, -CN, OH, CO<sub>2</sub>H, CHO, NO<sub>2</sub>, -NH<sub>2</sub>, -NH(C<sub>1</sub>-C<sub>4</sub>); N(C<sub>1</sub>-C<sub>4</sub>)<sub>2</sub>, -NH(C<sub>6</sub>aryl), -N(C<sub>6</sub>aryl)<sub>2</sub>, -NH(C<sub>5</sub>-C<sub>10</sub> heteroaryl), and -N(C<sub>5</sub>-C<sub>10</sub> heteroaryl)<sub>2</sub>; or a pharmaceutically acceptable salt thereof.

2. Use according to claim 1, wherein  $R_1$  or/and  $R_2$  are H, (S)-methyl, methyl, (R)-ethyl, (S)-ethyl, ethyl, (R)-propyl, (S)-propyl, propyl, (S)-butyl, (S)-1-methyl-propyl, (S)-2-methyl-propyl, (R)-isopropyl, (S)-isopropyl, isopropyl, cyclopentyl,  $-(CH_2)_2SMe$ , (R)- $CH_2SCH_2Ph$ , (S)-benzyl, 4-chloro-benzyl, (S)-3-methyl-1-H-indole or (S)-phenyl;

3. Use according to either of the preceding claims wherein  $R_3$  is chosen from the group consisting of; hydrogen, methyl, ethyl, phenyl, 3-hydroxy phenyl, 4-hydroxy phenyl, or forms a keto group together with  $R_4$ .

4. Use according to any of the preceding claims wherein  $R_4$  is H, methyl, or forms a keto group together with  $R_3$ .

5. Use according to any of the preceding claims wherein  $R_5$  is  $NO_2$ ,  $CN$ ,  $CH_2CN$  or  $CO_2H$ ;

6. Use according to any of the preceding claims wherein  $R_6$  is Me, or  $CF_3$ ;

7. Use according to any of the preceding claims wherein  $R_7$  is H or Me;

8. Use according to any of the preceding claims wherein  $R_8$  is H or methyl;

9. Use according to any of the preceding claims wherein X is  $NH$ ;

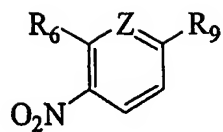
10. Use according to any of the preceding claims wherein Y is H, -OH, -OMe, -N  $(CH_2CH_3)_2$ , piperidine, or 4-nitro-2-ylamino;

11. Use according to any of the preceding claims wherein Z is  $CR_9$  or N;

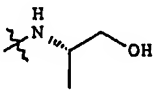
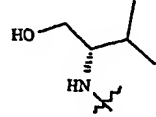
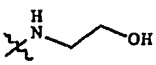
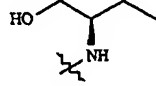
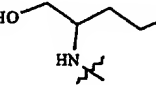
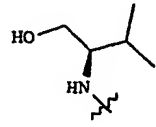
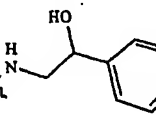
12. Use according to any of the preceding claims wherein the compound is chosen from the group consisting of;

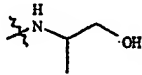
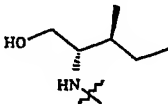
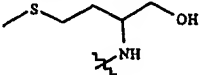
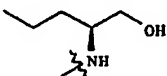
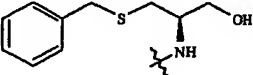
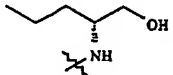
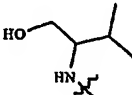
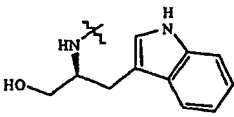
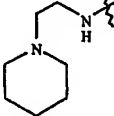
2-Methyl-2-(4-nitro-3-trifluoromethyl-phenylamino)-propan-1-ol;  
 [1-(4-Nitro-3-trifluoromethyl-phenylamino)-cyclopentyl]-methanol;  
 (S)-2-(4-Nitro-3-trifluoromethyl-phenylamino)-3-phenyl-propan-1-ol;

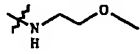
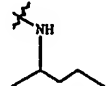
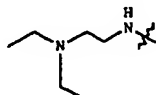
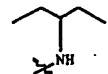
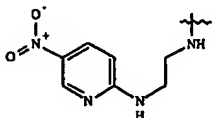
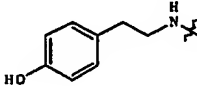
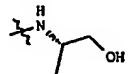
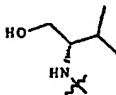
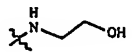
(S)-2-(4-Nitro-3-trifluoromethyl-phenylamino)-butan-1-ol;  
2-Methyl-2-(3-hydroxy-4-nitro-phenylamino)-propan-1-ol;  
[1-(3-Methyl-4-nitro-phenylamino)-cyclopentyl]-methanol;  
(S)-2-(3-Methyl-4-nitro-phenylamino)-butan-1-ol;  
*2-Methyl-2-(6-methyl-5-nitro-pyridine-2-ylamino)-propan-1-ol*;  
[1-(6-Methyl-5-nitro-pyridine-2-ylamino)-cyclopentyl]-methanol;  
(S)-2-(6-Methyl-5-nitro-pyridin-2-ylamino)-2-phenyl-ethanol;  
(S)-2-(6-Methyl-5-nitro-pyridine-2-ylamino)-3-phenyl-propan-1-ol;  
(S)-2-(6-Methyl-5-nitro-pyridin-2-ylamino)-butan-1-ol;  
(DL)-3-(4-Chloro-phenyl)-2-(6-methyl-5-nitro-pyridin-2-ylamino)-propan-1-ol;  
(S)-2-(6-Methyl-5-nitro-2-pyridin-2-ylamino)-propionic acid;  
(S)-2-(6-Methyl-5-nitro-pyridin-2-ylamino)-propan-1-ol;  
2-(2,3-Dimethyl-4-nitro-phenylamino)-2-methyl-propan-1-ol;  
(S)-2-(3,5-Dimethyl-4-nitro-phenylamino)-butan-1-ol;  
4-(2-Hydroxy-1,1-dimethyl-ethylamino)-2-trifluoromethyl-benzonitrile;  
4-(1-Hydroxymethyl-cyclopentylamino)-2-trifluoromethyl-benzonitrile;  
(S)-4-(1-Hydroxymethyl-cyclopentylamino)-2-trifluoromethyl-benzonitrile;  
(R)-4-(1-Hydroxymethyl-butylamino)-2-trifluoromethyl-benzonitrile;  
(S)-4-(1-Hydroxymethyl-butylamino)-2-trifluoromethyl-benzonitrile;  
[4-((S)-1-Hydroxymethyl-butylamino)-2-trifluoromethyl-phenyl]-acetonitrile;  
[4-((R)-1-Hydroxymethyl-butylamino)-2-trifluoromethyl-phenyl]-acetonitrile;  
[4-((S)-1-Hydroxymethyl-3-methyl-butylamino)-2-trifluoromethyl-phenyl]-acetonitrile;  
4-(2-Hydroxy-1,1-dimethyl-ethylamino)-2-methyl-benzonitrile;  
6-(2-Hydroxy-1,1-dimethyl-ethylamino)-2-methyl-nicotinonitrile;  
4-(2-Hydroxy-1,1-dimethyl-ethylamino)-2,3-dimethyl-benzonitrile;  
and compounds having the formula:



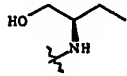
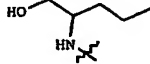
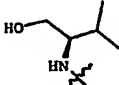
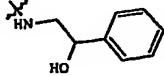
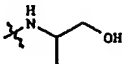
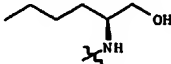
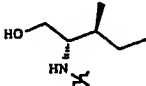
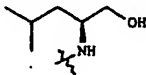
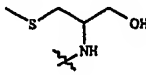
in which R<sub>9</sub>, R<sub>6</sub> and Z are as defined in the following table:

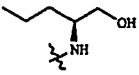
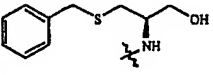
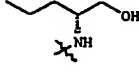
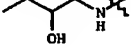
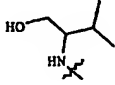
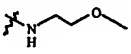


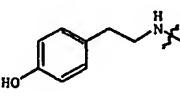
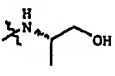
R9	R6	Z
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH

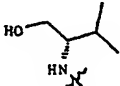
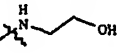
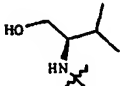
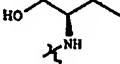
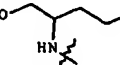
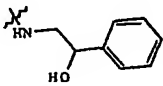
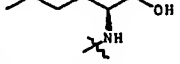
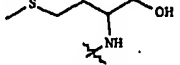
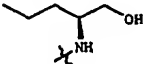
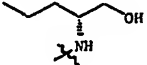
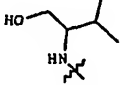
R9	R6	Z		
	CF <sub>3</sub>	CH		
	CF <sub>3</sub>	CH		
	CF <sub>3</sub>	CH		
	CF <sub>3</sub>	CH		
	CF <sub>3</sub>	CH		
	CF <sub>3</sub>	CH		
	CF <sub>3</sub>	CH		
	CF <sub>3</sub>	CH		
	CF <sub>3</sub>	CH		

R9	R6	Z
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N



R9	R6	Z
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N

R9	R6	Z
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	CH

R9	R6	Z		
	CH <sub>3</sub>	CH		
	CH <sub>3</sub>	CH		
	CH <sub>3</sub>	CH		
	CH <sub>3</sub>	CH		
	CH <sub>3</sub>	CH		
	CH <sub>3</sub>	CH		
	CH <sub>3</sub>	CH		
	CH <sub>3</sub>	CH		
	CH <sub>3</sub>	CH		
	CH <sub>3</sub>	CH		
	CH <sub>3</sub>	CH		

[illegible]

**4-(2-Hydroxy-1,1-dimethyl-ethylamino)-2-methyl-benzoic acid;**

**(6-Methyl-5-nitro-2-pyridin-2-ylamino)-butionic methyl ester.**

**2-Methyl-N-(6-methyl-5-nitro-pyridin-2-yl amino)-propan-2-ol;**

4-((R)-2-Hydroxy-1-methyl-ethylamino)-2-trifluoromethyl-benzonitrile

4-((R)-1-Furan-2-ylmethyl-2-hydroxy-ethylamino)-2-trifluoromethyl-benzonitrile

**(R)-3-Furan-2-yl-2-(6-methyl-5-nitro-pyridin-2-ylamino)-propan-1-ol**

**2-(6-Methyl-5-nitro-pyridin-2-ylamino)-heptan-1-ol**

**3-Cyclopentyl-2-(6-methyl-5-nitro-pyridin-2-ylamino)-propan-1-ol**

**2-(6-Methyl-5-nitro-pyridin-2-ylsulfanyl)-ethanol**

**[1-(4-Fluoro-3-methyl-phenylamino)-cyclopentyl]-methanol**

1- [4-(2-Hydroxy-1,1-dimethyl-ethylamino)-2-trifluoromethyl-phenyl]-ethanone

1-[4-((S)-1-Hydroxymethyl-3-methyl-butylamino)-2-trifluoromethyl-phenyl]-ethanone

1-[4-(1-Hydroxymethyl-cyclopentylamino)-2-trifluoromethyl-phenyl]-ethanone

[1-(4-Methanesulfonyl-3-methyl-phenylamino)-cyclopentyl]-methanol

2,2-Dimethyl-3-(6-methyl-5-nitro-pyridin-2-ylamino)-propan-1-ol

2,2-Dimethyl-3-(3-methyl-4-nitro-phenylamino)-propan-1-ol

4-((R)-1-Benzylsulfanylmethyl-2-hydroxy-ethylamino)-2-trifluoromethyl-benzonitrile

(R)-2-(6-Methyl-5-nitro-pyridin-2-ylamino)-3-phenylmethanesulfinyl-propan-1-ol

4-((R)-2-Hydroxy-1-phenylmethanesulfinylmethyl-ethylamino)-2-trifluoromethyl-benzonitrile

[1-(4-Nitro-phenylamino)-cyclopentyl]-methanol

(S)-2-(4-Nitro-phenylamino)-pentan-1-ol

(S)-4-Methyl-2-(4-nitro-phenylamino)-pentan-1-ol

[1-(2-Bromo-4-nitro-phenylamino)-cyclopentyl]-methanol

(S)-2-(2-Bromo-4-nitro-phenylamino)-pentan-1-ol

(S)-2-(2-Bromo-4-nitro-phenylamino)-4-methyl-pentan-1-ol

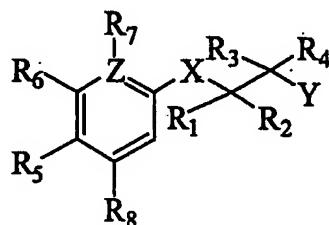
or a pharmaceutically acceptable salt thereof.

13. Use of compound according to claim 1, wherein  $R_1$  or  $R_2$  is a  $C_6$ - $C_{10}$  arylthio comprising an aryl-substituted sulfur-containing  $C_1$ - $C_{10}$  alkyl group.

14. Use of a compound according to claim 1, wherein in  $R_1$  or  $R_2$  the alkylsulfur is substituted with a  $C_6$  aryl group.

15. A pharmaceutical composition containing a compound as defined in Formula I of any preceding claim.

16. Use according to claim 1 wherein the disease is caused by an increase in androgen receptor activity.
17. Use according to any of claims 1-14 or 16 wherein the disease is chosen from the group consisting of, prostate cancer, lipid abnormalities, cardiovascular disease and psychological abnormalities, male pattern baldness (alopecia), benign prostatic hyperplasia (BPH) and acne, hirsutism, amenorrhea, hypogonadism, anemia, diabetes, defects in spermatogenesis, cachexia, osteoporosis, osteopenia, and muscle wasting.
18. A compound as defined by Formula I :



Formula I

in which;

R<sub>1</sub> and R<sub>2</sub> are the same or different and independently selected from the group consisting of; hydrogen, halogen, C<sub>1</sub>-C<sub>10</sub> alkyl, C<sub>1</sub>-C<sub>10</sub> substituted alkyl, C<sub>2</sub>-C<sub>10</sub> alkenyl, C<sub>2</sub>-C<sub>10</sub> alkynyl, C<sub>1</sub>-C<sub>10</sub> alkoxy, C<sub>1</sub>-C<sub>10</sub> alkenoxy, C<sub>1</sub>-C<sub>10</sub> alkynoxy, C<sub>1</sub>-C<sub>10</sub> alkylthio, C<sub>1</sub>-C<sub>10</sub> alkenylthio, C<sub>1</sub>-C<sub>10</sub> alkynylthio, C<sub>6</sub>-C<sub>10</sub> arylthio, C<sub>1</sub>-C<sub>10</sub> alkylsulphone, C<sub>1</sub>-C<sub>10</sub> alkenylsulphone, C<sub>1</sub>-C<sub>10</sub> alkynylsulphone, C<sub>6</sub>-C<sub>10</sub> arylsulphone, C<sub>1</sub>-C<sub>10</sub> alkylsulphoxide, C<sub>1</sub>-C<sub>10</sub> alkenylsulphoxide, C<sub>1</sub>-C<sub>10</sub> alkynylsulphoxide, C<sub>6</sub>-C<sub>10</sub> arylsulphoxide, C<sub>1</sub>-C<sub>10</sub> alkylarylthio, C<sub>1</sub>-C<sub>10</sub> alkylarylulphone, C<sub>1</sub>-C<sub>10</sub> alkylarylulphoxide, C<sub>6</sub>-C<sub>10</sub> aryl, or C<sub>3</sub>-C<sub>20</sub> heteroaryl, optionally substituted with 0, 1, 2 or 3 groups of R<sup>a</sup> which groups may be the same or different; or R<sub>1</sub> and R<sub>2</sub> may together form a C<sub>3</sub>-C<sub>10</sub> cycloalkyl group;

R<sub>3</sub> and R<sub>4</sub> are the same or different and independently selected from hydrogen, halogen, C<sub>1</sub>-C<sub>20</sub> alkyl, C<sub>3</sub>-C<sub>7</sub> cycloalkyl, C<sub>2</sub>-C<sub>4</sub> alkenyl, C<sub>2</sub>-C<sub>4</sub> alkynyl, C<sub>1</sub>-C<sub>4</sub> alkoxy, C<sub>1</sub>-C<sub>4</sub> alkenoxy, C<sub>1</sub>-C<sub>4</sub> alkynoxy, C<sub>1</sub>-C<sub>4</sub> alkylthio, C<sub>1</sub>-C<sub>4</sub> alkenylthio, C<sub>1</sub>-C<sub>4</sub> alkynylthio, C<sub>1</sub>-C<sub>10</sub> alkylsulphone, C<sub>1</sub>-C<sub>10</sub> alkenylsulphone, C<sub>1</sub>-C<sub>10</sub> alkynylsulphone, C<sub>6</sub>-C<sub>10</sub> arylsulphone, C<sub>1</sub>-C<sub>10</sub> alkylsulphoxide, C<sub>1</sub>-C<sub>10</sub> alkenylsulphoxide, C<sub>1</sub>-C<sub>10</sub> alkynylsulphoxide, C<sub>6</sub>-C<sub>10</sub> arylsulphoxide, C<sub>1</sub>-C<sub>10</sub> alkylarylthio, C<sub>1</sub>-C<sub>10</sub> alkylarylulphone, C<sub>1</sub>-C<sub>10</sub>

alkylarylsulphoxide, C<sub>6</sub>-C<sub>15</sub> aryl, C<sub>5</sub>-C<sub>20</sub> heteroaryl optionally substituted with 0, 1, 2 or 3 groups of R<sup>a</sup> which groups may be the same or different; or can together form a keto group;

R<sub>5</sub> is chosen from the group consisting of; nitro, cyano, -CH<sub>2</sub>CN, -COMe, acetic acid, halogen, sulphonic acid, -SO<sub>2</sub>CH<sub>3</sub>, aldehyde, carboxylic acid or ester, phosphonic acid or ester;

R<sub>6</sub> is chosen from the group consisting of; hydrogen, C<sub>1</sub>-C<sub>5</sub> alkyl, halogen, CN, CO<sub>2</sub>H, CHF<sub>2</sub>, CH<sub>2</sub>F or CF<sub>3</sub>;

R<sub>7</sub> is chosen from the group consisting of; H, halogen or C<sub>1</sub>-C<sub>5</sub> alkyl;

R<sub>8</sub> is chosen from the group consisting of; hydrogen, C<sub>1</sub>-C<sub>5</sub> alkyl, halogen, CHF<sub>2</sub>, CH<sub>2</sub>F or CF<sub>3</sub>;

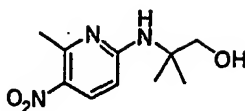
X is chosen from the group consisting of; -NH-, -O-, -S-, -SO-, -SO<sub>2</sub>-, -Se-, -Te- or -S-S-

Y is chosen from the group consisting of; hydrogen, hydroxy, -CH<sub>2</sub>OH, methoxy, NH<sub>2</sub>, unbranched, branched or cyclic C<sub>1</sub>-C<sub>5</sub> alkyl, unbranched, branched or cyclic -NH(C<sub>1</sub>-C<sub>5</sub>); unbranched, branched or cyclic N(C<sub>1</sub>-C<sub>5</sub>)<sub>2</sub>, -NH(C<sub>6</sub>aryl), -N(C<sub>6</sub>aryl)<sub>2</sub>, -NH(C<sub>1</sub>-C<sub>10</sub> heteroaryl), and -N(C<sub>5</sub>-C<sub>10</sub> heteroaryl)<sub>2</sub>, C<sub>5</sub>-C<sub>10</sub> heteroaryl wherein any of said aryl or heteroaryl groups are optionally substituted with up to 3 groups of R<sup>a</sup> which groups may be the same or different;

Z is chosen from the group consisting of; C, N, or O;

R<sup>a</sup> represents a member selected from: hydrogen, halogen, -CN, OH, CO<sub>2</sub>H, CHO, NO<sub>2</sub>, -NH<sub>2</sub>, -NH(C<sub>1</sub>-C<sub>4</sub>), N(C<sub>1</sub>-C<sub>4</sub>)<sub>2</sub>, -NH(C<sub>6</sub>aryl), -N(C<sub>6</sub>aryl)<sub>2</sub>, -NH(C<sub>5</sub>-C<sub>10</sub> heteroaryl), and -N(C<sub>5</sub>-C<sub>10</sub> heteroaryl)<sub>2</sub>; or a pharmaceutically acceptable salt thereof.

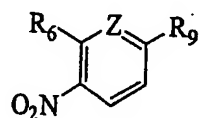
with the proviso that the compound is not:



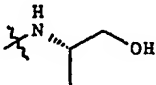
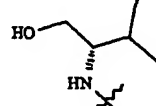
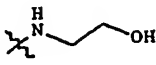
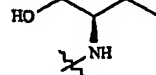
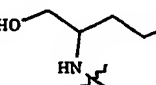
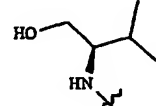
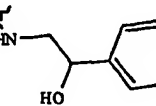
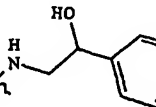
19. A compound according to claim 18, wherein  $R_1$  or/and  $R_2$  are H, (S)-methyl, methyl, (R)-ethyl, (S)-ethyl, ethyl, (R)-propyl, (S)-propyl, propyl, (S)-butyl, (S)-1-methyl-propyl, (S)-2-methyl-propyl, (R)-isopropyl, (S)-isopropyl, isopropyl, cyclopentyl,  $-(CH_2)_2SMe$ , (R)- $CH_2SCH_2Ph$ , (S)-benzyl, 4-chloro-benzyl, (S)-3-methyl-1-H-indole or (S)-phenyl;
20. A compound according to either of claims 18 and 19, wherein  $R_3$  is chosen from the group consisting of; hydrogen, methyl, ethyl, phenyl, 3-hydroxy phenyl, 4-hydroxy phenyl, or forms a keto group together with  $R_4$ .
21. A compound according to any of claims 18-20, wherein  $R_4$  is H, methyl, or forms a keto group together with  $R_3$ .
22. A compound according to any of claim 18-21, wherein  $R_5$  is  $NO_2$ , CN,  $CH_2CN$  or  $CO_2H$ ;
23. A compound according to any of claims 18-22, wherein  $R_6$  is Me, or  $CF_3$ .
24. A compound according to any of claims 18-23, wherein  $R_7$  is H or Me.
25. A compound according to any of claims 18-24, wherein  $R_8$  is H or methyl.
26. A compound according to any of claims 18-25, wherein X is NH.
27. A compound according to any of claims 18-26, wherein Y is H, -OH, -OMe, -N  $(CH_2CH_3)_2$ , piperidine, or 4-nitro-2-ylamino.
28. A compound according to any of claims 18-27, wherein Z is  $CR_7$  or N.
29. A compound according to any of claims 18-28, wherein the compound is chosen from the group consisting of:

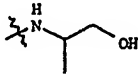
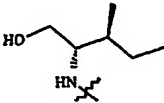
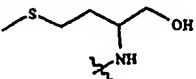
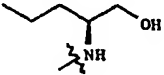
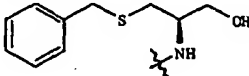
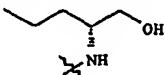
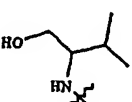
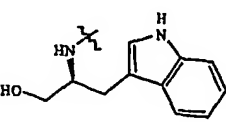
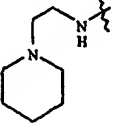




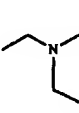

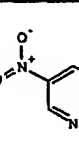
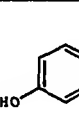

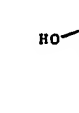

2-Methyl-2-(4-nitro-3-trifluoromethyl-phenylamino)-propan-1-ol;  
 [1-(4-Nitro-3-trifluoromethyl-phenylamino)-cyclopentyl]-methanol;  
 (S)-2-(4-Nitro-3-trifluoromethyl-phenylamino)-3-phenyl-propan-1-ol;  
 (S)-2-(4-Nitro-3-trifluoromethyl-phenylamino)-butan-1-ol;  
 2-Methyl-2-(3-hydroxy-4-nitro-phenylamino)-propan-1-ol;  
 [1-(3-Methyl-4-nitro-phenylamino)-cyclopentyl]-methanol;  
 (S)-2-(3-Methyl-4-nitro-phenylamino)-butan-1-ol;  
 2-Methyl-2-(6-methyl-5-nitro-pyridine-2-ylamino)-propan-1-ol;  
 [1-(6-Methyl-5-nitro-pyridine-2-ylamino)-cyclopentyl]-methanol;  
 (S)-2-(6-Methyl-5-nitro-pyridine-2-ylamino)-2-phenyl-ethanol;  
 (S)-2-(6-Methyl-5-nitro-pyridine-2-ylamino)-3-phenyl-propan-1-ol;  
 (S)-2-(6-Methyl-5-nitro-pyridine-2-ylamino)-butan-1-ol;  
 (DL)-3-(4-Chloro-phenyl)-2-(6-methyl-5-nitro-pyridine-2-ylamino)-propan-1-ol;  
 (S)-2-(6-Methyl-5-nitro-pyridine-2-ylamino)-propionic acid;  
 (S)-2-(6-Methyl-5-nitro-pyridine-2-ylamino)-propan-1-ol;  
 2-(2,3-Dimethyl-4-nitro-phenylamino)-2-methyl-propan-1-ol;  
 (S)-2-(3,5-Dimethyl-4-nitro-phenylamino)-butan-1-ol;  
 4-(2-Hydroxy-1,1-dimethyl-ethylamino)-2-trifluoromethyl-benzonitrile;  
 4-(1-Hydroxymethyl-cyclopentylamino)-2-trifluoromethyl-benzonitrile;  
 (S)-4-(1-Hydroxymethyl-cyclopentylamino)-2-trifluoromethyl-benzonitrile;  
 (R)-4-(1-Hydroxymethyl-butylamino)-2-trifluoromethyl-benzonitrile;  
 (S)-4-(1-Hydroxymethyl-butylamino)-2-trifluoromethyl-benzonitrile;  
 [4-((S)-1-Hydroxymethyl-butylamino)-2-trifluoromethyl-phenyl]-acetonitrile;  
 [4-((R)-1-Hydroxymethyl-butylamino)-2-trifluoromethyl-phenyl]-acetonitrile;  
 [4-((S)-1-Hydroxymethyl-3-methyl-butylamino)-2-trifluoromethyl-phenyl]-acetonitrile;  
 4-(2-Hydroxy-1,1-dimethyl-ethylamino)-2-methyl-benzonitrile;  
 6-(2-Hydroxy-1,1-dimethyl-ethylamino)-2-methyl-nicotinonitrile;  
 4-(2-Hydroxy-1,1-dimethyl-ethylamino)-2,3-dimethyl-benzonitrile;  
 and compounds having the formula:

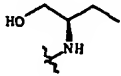
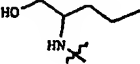
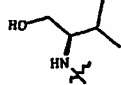
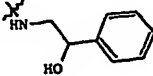
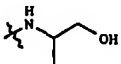
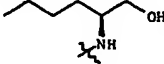
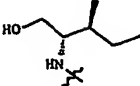
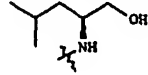
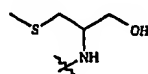


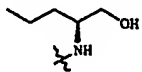
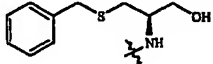
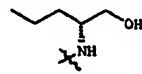
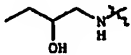
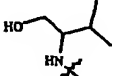
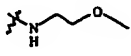


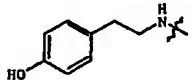
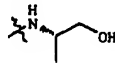
in which  $\text{R}_9$ ,  $\text{R}_6$  and  $\text{Z}$  are as defined in the following table:

R9	R6	Z
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH

R9	R6	Z		
	CF <sub>3</sub>	CH		
	CF <sub>3</sub>	CH		
	CF <sub>3</sub>	CH		
	CF <sub>3</sub>	CH		
	CF <sub>3</sub>	CH		
	CF <sub>3</sub>	CH		
	CF <sub>3</sub>	CH		
	CF <sub>3</sub>	CH		
	CF <sub>3</sub>	CH		

R9	R6	Z
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CF <sub>3</sub>	CH
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N

R9	R6	Z
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N

R9	R6	Z
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	N
	CH <sub>3</sub>	CH

R9	R6	Z		
	CH <sub>3</sub>	CH		
	CH <sub>3</sub>	CH		
	CH <sub>3</sub>	CH		
	CH <sub>3</sub>	CH		
	CH <sub>3</sub>	CH		
	CH <sub>3</sub>	CH		
	CH <sub>3</sub>	CH		
	CH <sub>3</sub>	CH		
	CH <sub>3</sub>	CH		
	CH <sub>3</sub>	CH		

4-(2-Hydroxy-1,1-dimethyl-ethylamino)-2-methyl-benzoic acid;  
(6-Methyl-5-nitro-2-pyridin-2-ylamino)-butionic methyl ester;  
2-Methyl-N-(6-methyl-5-nitro-pyridin-2-yl amino)-propan-2-ol;  
4-((R)-2-Hydroxy-1-methyl-ethylamino)-2-trifluoromethyl-benzonitrile  
4-((R)-1-Furan-2-ylmethyl-2-hydroxy-ethylamino)-2-trifluoromethyl-benzonitrile  
(R)-3-Furan-2-yl-2-(6-methyl-5-nitro-pyridin-2-ylamino)-propan-1-ol  
2-(6-Methyl-5-nitro-pyridin-2-ylamino)-heptan-1-ol  
3-Cyclopentyl-2-(6-methyl-5-nitro-pyridin-2-ylamino)-propan-1-ol  
2-(6-Methyl-5-nitro-pyridin-2-ylsulfanyl)-ethanol  
[1-(4-Fluoro-3-methyl-phenylamino)-cyclopentyl]-methanol  
1-[4-(2-Hydroxy-1,1-dimethyl-ethylamino)-2-trifluoromethyl-phenyl]-ethanone  
1-[4-((S)-1-Hydroxymethyl-3-methyl-butylamino)-2-trifluoromethyl-phenyl]-ethanone



1-[4-(1-Hydroxymethyl-cyclopentylamino)-2-trifluoromethyl-phenyl]-ethanone

[1-(4-Methanesulfonyl-3-methyl-phenylamino)-cyclopentyl]-methanol

2,2-Dimethyl-3-(6-methyl-5-nitro-pyridin-2-ylamino)-propan-1-ol

2, 2-Dimethyl-3-(3-methyl-4-nitro-phenylamino)-propan-1-ol

4-((R)-1-Benzylsulfanylmethyl-2-hydroxy-ethylamino)-2-trifluoromethyl-benzonitrile

(R)-2-(6-Methyl-5-nitro-pyridin-2-ylamino)-3-phenylmethanesulfinyl-propan-1-ol

4-((R)-2-Hydroxy-1-phenylmethanesulfinylmethyl-ethylamino)-2-trifluoromethyl-benzonitrile

[1-(4-Nitro-phenylamino)-cyclopentyl]-methanol

(S)-2-(4-Nitro-phenylamino)-pentan-1-ol

(S)-4-Methyl-2-(4-nitro-phenylamino)-pentan-1-ol

[1-(2-Bromo-4-nitro-phenylamino)-cyclopentyl]-methanol

(S)-2-(2-Bromo-4-nitro-phenylamino)-pentan-1-ol

(S)-2-(2-Bromo-4-nitro-phenylamino)-4-methyl-pentan-1-ol

30. A compound according to any of claims 18-29, wherein  $R_1$  or  $R_2$  is a  $C_6$ - $C_{10}$  arylthio comprising an aryl-substituted sulfur-containing  $C_1$ - $C_{10}$  alkyl group.

31. A compound according to any of claims 18-30, wherein in  $R_1$  or  $R_2$  the alkylsulfur is substituted with a  $C_6$  aryl group.